2. (amended) The diagnostic agent of claim 1 wherein said substituted aromatic amide group is of the formula

I

$$-(CH2)m-C-N-A1$$

wherein

 A_1 is - $(CH_2)_m$ ' - or a single bond;

(CH₂)_m and (CH₂)_m' may independently be substituted with alkyl or hydroxyalkyl;

R₁ and R₂ are independently hydrogen,

where R_9 is C_4 - C_{18} straight or branched chain alkyl or hydroxyalkyl, with the proviso that at least one of R_1 and R_2 must be other than hydrogen;

 R_3 and R_4 are independently hydrogen, alkyl, arylalkyl, aryl, alkoxy and hydroxyalkyl; R_{12} is hydrogen, alkyl or hydroxyalkyl;

 R_{13} is hydrogen, alkyl or arylalkyl, aryl, alkoxy or hydroxyalkyl;

m and m' are independently 0 to 5;

and multimeric forms thereof.

3. (amended) A diagnostic agent of claim 2 wherein said ligand is of the formula

Ia

Ib

$$X_1$$
- H_2 C $(CH_2)_m$ - C - N - A_1 R_2 V - R_3 HC CHR_5 - V

Ic

$$(X_1-H_2C)_2N-(CH_2)_m-C-N-A_1$$

Id

wherein m, R_{13} , A_1 , R_1 , R_2 , and R_{12} are as defined in claim 2 and wherein

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X₁ is -COOY₁, PO₃HY₁ or -CONHOY₁;

Y₁ is a hydrogen atom, a metal ion equivalent and/or a physiologically biocompatible cation of an inorganic or organic base or amino acid;

 A_2 is -CHR₆-CHR₇-, -CH₂CH₂(ZCH₂-CH₂)_n-,

$$N(CH_2X_1)_2$$
 $CH_2-CH_2-N(CH_2X_1)_2$ -CH₂-CH-CH₂ or -CH₂-CH₂-CH₂-CH₂-, wherein X_1 is as defined above; each R_5 is hydrogen or methyl;

 R_6 and R_7 together represent a trimethylene group or a tetramethylene group or individually are hydrogen atoms, lower alkyl groups (e.g., 1-8 carbons), phenyl groups, benzyl groups or R_6 is a hydrogen atom and R_7 is a -(CH₂)_p-C₆-H₄-W-protein where p is 0 or 1, W is -NH-, -NHCOCH₂- or -NHCS-, protein represents a protein residue;

n is 1, 2 or 3;

Z is an oxygen atom or a sulfur atom or the group NCH_2X_1 or $NCH_2CH_2OR_8$ wherein X_1 is as defined above and R_8 is C_{1-8} alkyl;

V is X_1 or is -CH₂OH, -CONH(CH₂)_r X_1 or -COB, wherein X_1 is as defined above, B is a protein or lipid residue, r is an integer from 1 to 12, or if R_5 , R_6 and R_7 are each hydrogen; then both V's together form the group

where X_1 is as above, w is 1, 2 or 3, provided that at least two of the substituents Y_1 represent metal ion equivalents of an element with an atomic number of 21 to 29, 42, 44 or 57 to 83; from 1 to 4, advantageously 2 or 3, and preferably 2 M's are -OH and the balance independently are

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-OR₁₀, -NH₂, -NHR₁₀ and/or NR₁₀R₁₀' wherein R₁₀ and R₁₀' are selected from an organic alkyl radical of up to 18 carbon atoms which may be substituted.

6. (amended) A compound of the formula

wherein

 A_1 is $-(CH_2)_m$ ' - or a single bond;

(CH₂)_m and (CH₂)_m' may independently be substituted with alkyl or hydroxyalkyl;

 R_1 and R_2 are each independently hydrogen,

alkyl, -NO₂, -NH₂, -NHCNHR₁₂, -C-NR₃R₄ and NR₃COR₉ where R₉ is C₄ -C₁₈ straight or branched chain alkyl or hydroxyyalkyl, with the proviso that at least one of R₁ and R₂ must be other than hydrogen;

R₃ and R₄ are independently hydrogen, alkyl, arylalkyl, aryl, alkoxy and hydroxyalkyl;

R₁₂ is hydrogen, alkyl or hydroxyalkyl;

R₁₃ is hydrogen, alkyl, arylalkyl, aryl, alkoxy or hydroxyalkyl;

m and m' are independently 0 to 5;

and multimeric forms thereof.

11. (amended) A compound of the formula

having the name 10-[2-[[3,5-bis[(2,3-dihydroxypropyl)amino]-carbonyl]phenyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid,

wherein

 A_1 is -(CH₂)_m' - or a single bond;

(CH₂)_m and (CH₂)_m' may independently be substituted with alkyl or hydroxyalkyl;

R₁ and R₂ are each independently hydrogen,

alkyl, -NO₂, -NH₂, -NHCNHR₁₂, -C-NR₃R₄ and NR₃COR₉ where R₉ is C₄ -C₁₈ straight or branched chain alkyl or hydroxyyalkyl, with the proviso that at least one of R₁ and R₂ must be other than hydrogen;

R₃ and R₄ are independently hydrogen, alkyl, arylalkyl, aryl, alkoxy and hydroxyalkyl;

R₁₂ is hydrogen, alkyl or hydroxyalkyl;

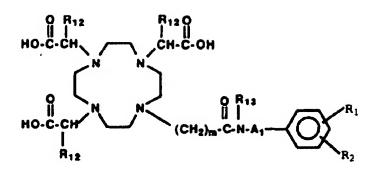
R₁₃ is hydrogen, alkyl, arylalkyl, aryl, alkoxy or hydroxyalkyl;

m and m' are independently 0 to 5;

and multimeric forms thereof.

39. A complex or a pharmaceutically acceptable salt of a complex, of a metal atom and a metal chelating ligand having the formula

A21



wherein

 A_1 is -(CH₂)_m'- or a single bond;

(CH₂)_m and (CH₂)_m' may independently be substituted with alkyl or hydroxyalkyl;

R₁ and R₂ are each independently hydrogen,

A21/

alkyl, -NO₂, -NH₂, -NHCNHR₁₂, -C-NR₃R₄ and NR₃COR₉ where R₉ is C₄ -C₁₈ straight or branched chain alkyl or hydroxyyalkyl, with the proviso that at least one of R₁ and R₂ must be other than hydrogen;

 R_3 and R_4 are independently hydrogen, alkyl, arylalkyl, aryl, alkoxy and hydroxyalkyl; R_{12} is hydrogen, alkyl or hydroxyalkyl;

R₁₃ is hydrogen, alkyl, arylalkyl, aryl, alkoxy or hydroxyalkyl;

m and m' are independently 0 to 5;

and multimeric forms thereof.